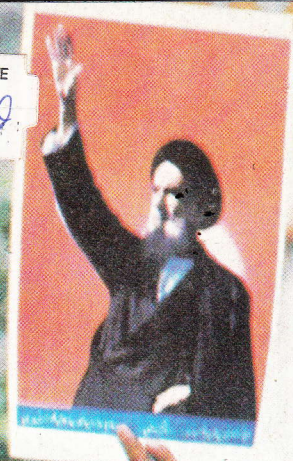


# WAR IN PEACE

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# Battle for the north

How Chiang Kai-shek  
was outmanoeuvred in Manchuria



For about a year after the Japanese surrender in August 1945 an uneasy truce reigned between the communists and the Nationalists in China. Although talks were held they were doomed to failure, given the utterly contradictory aims of the two sides. At the same time the communists used the truce to consolidate their positions. They controlled most of Manchuria and northeast China while the Nationalists held the south and also the capital, Peking (now known as Beijing).

In 1947 the Chinese Nationalists mounted a series of fierce attacks against their communist enemies which initially suggested that they might be well on their way to winning the civil war. Communist forces were driven back in Manchuria; much of Shantung (Shandong) province was reconquered; and Yanan (Yanan), the headquarters of Mao's most famous base area, was occupied. Chiang Kai-shek boasted of his absolute superiority in terms of manpower, equipment, food, fodder and ammunition. The communists, he said, would be destroyed within six months.

Yet shortly after, one analyst highlighted a number of fundamental weaknesses which were to contribute to the Nationalists' ultimate defeat. He described the Nationalist (Kuomintang) Party as 'decrepit and degenerate' and as 'lacking standards of right and wrong'. He castigated officers for their lack of professional skill and spoke of their 'miniscule abilities'. They were specifically criticised for their ill-treatment of the men under their command, their lack of concern for soldiers' well-being, and their corruption. Senior commanders were accused of failing to cooperate and of acting like warlords. The communists, by contrast, were praised for their attention to the welfare of their soldiers, the willingness of officers to live as their men did, and their insistence on meticulous political and military education.

Over 30 years later few would disagree with these assessments. What is surprising, however, is the identity of the man who made them. It was Chiang Kai-shek himself. Chiang was fully aware of the deficiencies of his own supporters, which strengthens the case for describing him as 'the man who lost China'. The faults he described had long been present, yet he had recognised them only belatedly and, even when he had done so, he failed to act to rectify them. And it was in Manchuria that the chickens began to come home to roost.

Chiang himself was largely responsible for the decision to re-occupy Manchuria after World War II, despite advice from both Americans and Chinese that he should first establish complete control over China south of the Great Wall. Chiang did so because of an obsession with the prestige of his regime, which he tended to measure in terms of the numbers of cities it controlled. A more able leader might have learned from the fate of the Japanese invaders that even the



## CHINESE CIVIL WAR

best-disciplined and best-equipped troops could face insurmountable difficulties by over-extending themselves in a vast agrarian country where over 80 per cent of the population lived in villages. Chiang failed to do so.

Instead, he deployed his troops in cities, often separated from each other by hundreds of miles and served by a poorly developed communications system which was hard to defend and maintain. Chiang's concept of strategy and tactics was essentially static and inflexible and bore little relation to military necessities. Prolonged garrison duty made his troops lazy and lax. A 'defensive mentality' pervaded Nationalist ranks and commanders came to regard it as a victory merely to beat off an enemy attack. As both political influence in Nationalist affairs and opportunities for profitable corruption were closely linked to the size of one's forces, senior officers were often content to leave the communists a route for escape rather than risk heavy losses by hot pursuit.

Mao, however, emphasised a war of movement and flexibility. He attached little value to holding territory for its own sake, even when it was of the symbolic importance of Yenan. China was large and there was always somewhere for his troops to move to if necessary. For him war was a question of annihilating the enemy by emphasising mobility in order to concentrate overwhelmingly superior forces against units which were weak. Whereas Chiang's forces were perpetually faced with immense logistical prob-

lems, the communists could speedily fade away into the countryside from where they had come. Mao's military genius lay in stressing the importance of linking the military struggle with political, economic and social movements. Long before 'winning the hearts and minds' became a cant phrase, Mao had preached the need for a 'people's war'.

In essence this was simplicity itself. Lacking the material resources of their enemies, the communists could only survive and flourish by being mobile. This in turn depended on relying on local sources for intelligence and supply. Mao's troops had to be what he called the 'fish' sustained by the 'sea' of the masses, and that meant acquiring popular support. From 1926 onwards Mao taught that the peasants were the source of real power, without whom no revolution could ultimately succeed. By trial and error, and a measure of luck, the communists evolved a code of 'good behaviour', as it were, which they applied in the areas where they operated. They permitted non-communists a reasonable degree of participation in local affairs, made their armed forces responsible for their own maintenance and introduced progressive reforms. Above all they focused on education, both in the narrow sense of establishing a sophisticated system of political commissions and instruction within the armed forces, and in the wider sense of disseminating propaganda among the rural population. In return the villagers supplied them with information, food and equipment, and a steady

Previous page: A Nationalist soldier stands guard at an outpost near Shanghai prior to the communist assault on 5 July 1949. He is equipped with a US Thompson submachine gun.





Below: Communist troops, some armed with Russian light machine-guns, storm a walled city near Mukden during the Manchurian campaign.

stream of strong peasant boys for their regular forces, guerrilla units and local militias.

Mao also used such tactics on the enemy. Captured Nationalists were well treated, subjected to propaganda and 'turned rural'. Sometimes they would be released in order to carry the message of the communists' humane behaviour back to their comrades. It was deliberate policy to encourage enemy soldiers to desert, and those who did so were rewarded and integrated into communist forces. In every respect Mao's all-encompassing vision and subtlety proved superior to Chiang's rigid and limited approach.

Thus, although Mao's forces suffered heavy casualties in 1947, they were able to extend their operations in many parts of north, central and east China and, moreover, began to show an increased willingness to attack Nationalist strongholds. And it was in Manchuria that General Lin Piao started to attack, isolate and ultimately destroy heavy concentrations of Nationalist troops.

At the beginning of 1947 Lin's assaults were

successfully repulsed by one of Chiang's more able commanders, General Sun Li-jen. But as the year progressed Chiang engaged in a series of re-shuffles of the Manchurian command structure which served to confirm his unerring ability to remove generals of proven competence and replace them with mediocrities, partly on the grounds of personal loyalty to himself. Lin Piao again took the offensive in May and succeeded in surrounding Nationalist garrisons in the cities of Kirin (Jilin), Changchun and Szeepingkai (Siping). The communists followed their usual tactic of cutting lines of communication and Chiang found himself faced with the problem of attempting to supply about 700,000 government personnel, of whom only about a third were effective combat troops. In the autumn of 1947 all the railway connections into the city of Mukden (Shenyang) were cut, and in the bitterly cold winter the communists captured a number of Nationalist strongholds. At the beginning of 1948 Chiang tried to improve the situation in another re-shuffle which made General Wei





## Lin Piao, victor in Manchuria

Born into a peasant family in Hopeh province in 1907, Lin Piao was to become one of the most celebrated commanders of the Red Army and, at the height of his career, second only to Mao Tse-tung himself in the leadership of the Chinese Communist Party. He graduated from the Whampoa Military Academy in 1926 and joined the Communist Party the following year. By 1932 he was commander of the 1st Army Corps, which he led on the Long March (1934-35).

In the late 1930s he spent several years recovering from serious wounds in a Soviet hospital, but on the resumption of the civil war in China he played a crucial role and commanded the forces that routed the Nationalists in Manchuria and in the Peking-Tientsin campaign.

Following the communist triumph Lin rapidly acquired political power, becoming vice-premier in 1954, a member of the politburo a year later



and defence minister in 1959. During the Cultural Revolution, which began in 1966, he gave Mao the enthusiastic support of the armed forces. Soon afterwards, however, his career went into decline and he was ultimately disgraced. Lin is thought to have planned a military coup against Mao in 1971. When the plot was exposed he tried to flee to Russia by air but was killed when the aircraft crashed in Mongolia.

Li-huang commander in Manchuria in place of the more able Ch'en Ch'eng.

By this time, however, the problem was largely logistical. In the Mukden sector some 150,000 to 200,000 Nationalist troops had to be supplied by air because of communist success at cutting the railways. But air transport could cope with only a third of the tonnage required and the operation was unbelievably costly. In a secret report the minister of war revealed in September 1948 that the whole of the military budget for the second half of the year had been spent in air-lifting supplies into the single city of Changchun for a period of just over two months.

Matters were made worse by Chiang's personal interference. He held regular briefings to which only some of the key figures in the military command were invited and regularly issued orders without either consulting or informing those who should have been put in the picture. Ignorant of the generalissimo's wishes, other members of the high command issued their own orders, creating total confusion for the generals who were actually required to carry them out. In October 1948 Chiang went to Peking to be closer at hand to the area of operations. The quality of his orders improved, but by this time the situation was so muddled that they were not always obeyed. In any event, Lin Piao's final offensive was already underway.

By September, Lin had mustered a force of 600,000 men in Manchuria. A total of 65,000 surrounded Changchun, 183,000 were placed around Mukden, 179,000 between Mukden and Chinchow (Jinzhou), and 180,000 were held in reserve. Against them the Nationalists could deploy only 300,000 as a field army.

Lin first moved on Chinchow. Nationalist troops brought in from Formosa (Taiwan) through the port of Hulutao were successfully halted, as was a relief force sent from Mukden. On 17 October the Chinchow garrison of 100,000 men surrendered. Changchun, the capital of Manchuria and far to the north of Mukden, fell three days later. Its loss was a particularly bitter blow in that it was partly due to a revolt, in which one of its garrison units had opened fire on another. Five Nationalist divisions fell into communist hands.

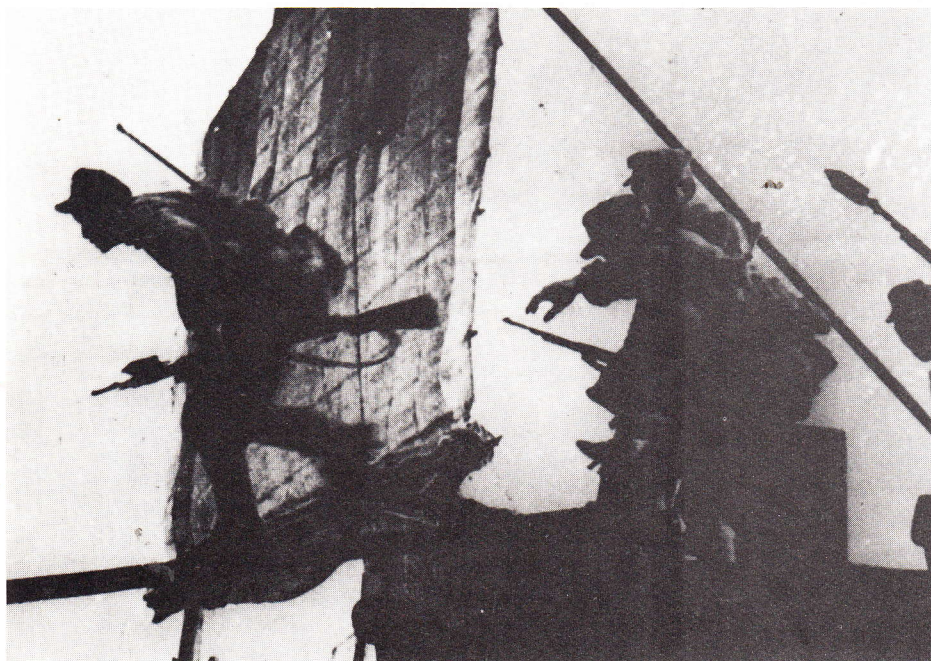
Meanwhile Chiang had ordered a substantial part of the Mukden garrison to recapture Chinchow, in conjunction with the forces earlier landed at Hulutao. The actual commander of the Mukden troops was General Tu Yu-ming, a man whose position derived from personal friendship with Chiang rather than any demonstrable military skill. Tu preferred to remain in Mukden so the recapture of Chinchow was entrusted to Liao Yao-hsiang, a general who had fought with real distinction against the Japanese in Burma.

Lin Piao, however, moved briskly. With 200,000 men he fell upon Liao's advancing forces from the flank and rear. In three days of fierce fighting, Lin's troops attacked in human waves, supported by a murderous artillery barrage. Liao was killed early in the battle, and his entire force was routed by 30 October. Mukden, with its depleted garrisons, was now defenceless. Its commander defected to the communists and the troops surrendered. Communist forces were now supreme in Manchuria.

Altogether the Nationalists lost some 300,000 of their best troops together with all their weapons. The communists also acquired a number of arsenals.







'The condition of the conscripts and troops in Shensi and Kansu was very poor – so poor at times as to almost beggar description. This miserable condition of the conscripts, especially, is so general in the northwest that it is a universal subject of comment by both foreigners and Chinese. Almost everyone has several "horror" stories to tell. . . . When I have watched them eat they have had nothing but rice. It is usually a question of the strongest and fittest getting the most. The weak and sick get little. In Kwangyuan I saw a group of conscripts attack a crippled candy peddler. He was pushed over and all of his wares plundered in a matter of seconds. The guards paid no attention until after it was over. They then kicked several in the stomach and hit others with the butts of their rifles. The men seemed obviously starved.'

*John S. Service, a US intelligence officer, reporting on Nationalist troops.*

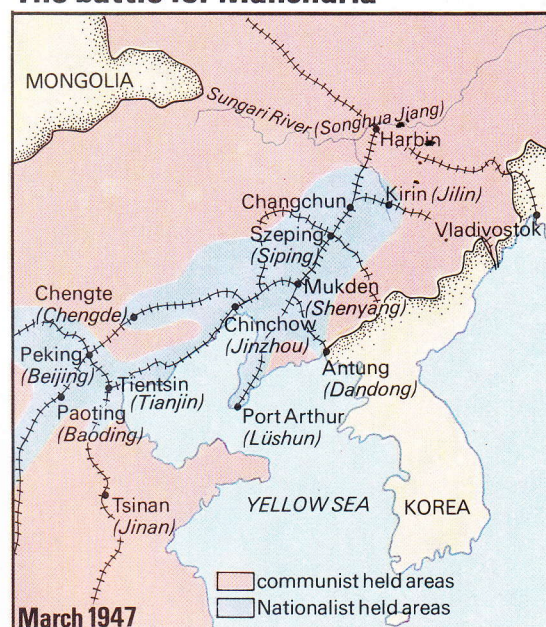
Above: Control of the great rivers of China was of paramount importance to the communist military leaders as these inland waterways provided important lines of communication and supply to front line troops. Here communist troops advance through a town on the Yangtse River.

Left: Communist troops advance across a river in Hopeh province. The manoeuvrability of the communist infantry and their seemingly unending forward momentum were in stark contrast to the rigid defensive tactics of the Nationalists.

including the one at Mukden, which was particularly well-equipped. Furthermore, victory in Manchuria enabled the communists to divert 400,000 of Lin Piao's troops south of the Great Wall, and these flooded into north China with a speed that astonished Nationalist generals there.

The outcome of the struggle for Manchuria showed that the nature of the civil war had changed decisively. The communists had proved conclusively that they were more than a guerrilla army capable of controlling large tracts of countryside but ill-equipped to conquer the urban bastions of the Nationalists. By the autumn of 1948 they had moved their style of warfare to a new and higher plane – that of conquering and holding great cities. They still retained the classic advantages of a guerrilla army – mobility and flexibility – but their iron discipline meant that they could make the transition to more conventional warfare with quite remarkable ease and outfight armies that had, ostensibly, great advantages over them.

## The battle for Manchuria





## CHINESE CIVIL WAR

The Nationalists, by contrast, had confirmed their ineptitude. Even in narrowly military terms they had failed to exploit their advantages. Their air superiority and their control of coastal ports proved unable to counter the communists' ability to dominate land communications. The loss of Manchuria, then, was the beginning of the end for Chiang Kai-shek. But defeats of even greater magnitude were to await him in the flat plains of central China between Hsuehchow and the Huai River.

**John Gardner**

### Mukden's final hours

Shortly before Mukden fell to the communists in November 1948 an American reporter, Roy Rowan, flew into the beleaguered city. 'Mukden,' he wrote, 'is a ghost city. No preparation had been made for a last-stand defence. Most of the government troops were encamped near rail sidings awaiting evacuation. In the city itself, freezing blasts of wind whistled down the broad, empty thoroughfares.... [Mukden] looked as cold and desolate as the ragged, half-frozen refugees on every street. Only the railway station and the airports were active. Streets by the depot were jammed with refugees peddling old bits of belongings to buy food. Every few hours trains overflowing with yellow-clad troops left Mukden station and rattled south toward the evacuation port of Yingkow. At Pai Ling field, the last military airstrip, planes flew out whole companies and battalions of troops. Civilians also were flown out. And for them a little slip of white paper – a plane ticket to Tsingtao or Tientsin – was suddenly the most precious possession in the world.'



Above: The Nationalist commander of Mukden, General Wei Li-huang

(centre), outlines his plans for evacuation of the city. Below: A Nationalist gun

section prepare a water-cooled heavy machine gun for firing near Kalgan.





# Final triumph

## Hsuehchow and the Nationalist collapse



The catastrophic loss of Manchuria was rationalised by Chiang Kai-shek when he publicly proclaimed it would permit his forces to concentrate more effectively on the defence of China proper. This statement gave little comfort to those who had advised him years earlier to avoid Manchurian entanglements in order to consolidate his hold on China south of the Great Wall. Their morale slumped further when they learned that Chiang proposed to make his next stand around the city of Hsuehchow (now called Xuzhou) in the province of Anhwei (Anhui).

A number of his best strategists argued in favour of defending the Huai River, which runs approximately 160km (100 miles) north of the Yangtse and which was traditionally regarded as the natural line of defence for that populous and prosperous region. Yet again, however, Chiang ignored wise counsel and decreed that the major effort would be concentrated on Hsuehchow, 160km (100 miles) north of the Huai. The city stood at the junction of the important Lunghai and Tsin-pu railways and constituted a gateway between north and south China.

It was a poor venue, nonetheless. Situated at the southern end of the north China plain, Hsuehchow was the centre of a region which offered superb opportunities for the kind of war of manoeuvre at which the communists excelled. Chiang's obsession with maintaining large urban garrisons and the concomitant need to guard the extensive sections of railway line which connected them, made his forces an easy target

for the tactics of rapid thrusts, annihilating attacks on isolated units and encirclement – tactics at which Mao's generals had already proven themselves so adept.

The ensuing Huai-hai campaign, which derived its name from the territory between the Lunghai railway and the Huai River, was waged on an enormous scale. Even before it began, however, Hsuehchow was in difficulties. Ch'en Yi, who commanded communist forces in east China, had already conquered most of the province of Shantung (Shandong) and threatened the city from the north. To the west of it, the communist forces of Liu Po-ch'eng dominated central China north of the Yangtse. Liu's men had already seized two important points on the Lunghai railway and were well placed to cut Hsuehchow's communications with the south. Ch'en Yi, who had field command, was able to deploy 500,000 troops in the Huai-hai area.

Superficially, the Nationalists were equally strong in the sense that they possessed a similar number of regular troops. The Nationalist Second Army Group of 12 divisions was already stationed to the west of the city under the command of Ch'iu Ch'ing-ch'uan. To the east, Huang Po-t'ao's Seventh Army Group of 10 divisions stretched along the Lunghai railway as far as the coast. In and around Hsuehchow were the Armoured Corps and the garrison forces of the Hsuehchow Bandit Suppression Headquarters. The Eighth Army Group lay to the west of the city and the Sixth to the south. Chiang also ordered the Thirteenth and Sixteenth

Two Nationalist soldiers rest for a few moments during action in 1949. Although relatively well equipped, the Nationalists were unable to match the commitment and will to win of Mao's forces.





Nationalist troops in trenches near Hsuehchow await an imminent communist attack.

Army Groups to march to join the forces already in position and, at a later stage, ordered Huang Wei's Twelfth Army Group to march north to join the battle. All in all, some 51 Nationalist divisions were committed, including some which were American-equipped and trained. The Nationalists also enjoyed total air supremacy.

Nationalist equality, however, was more theoretical than real. Even in terms of numbers, the communists had a real superiority because of their unique 'people's war' which assigned military roles to a host of individuals who were not, strictly speaking, first line troops. If one includes logistical and guerrilla support units, total communist strength in the Huai-hai campaign may have given them a ratio as high as six to one over the Nationalists. Moreover, half-starved and subject to brutal discipline, Nationalist troops lacked the motivation to fight and were often willing to defect to the enemy at the first opportunity. The contrast with the highly indoctrinated, well-disciplined soldiers in the communist ranks was marked.

At the highest echelons, too, differences were apparent. The communist side enjoyed a remarkable degree of unity. Ch'en Yi was nominally in control and his East China Field Army was roughly twice the strength of Liu Po-ch'eng's Central Plains Field Army. Yet Ch'en was reportedly willing to defer to Liu, the 'one-eyed dragon', on strategy decisions. Together they formed the 'hammer and the brains' of the communist forces, and their staffs and commanders worked in harmony.

The Nationalist command, however, was riven by deep-seated factionalism; at least four rival cliques constantly squabbled among themselves and took a peculiar delight in sabotaging each other's operations in the interests of short-term personal advantage. The confusion which resulted was further exacerbated by Chiang Kai-shek's insistence on master-minding the campaign from Nanking (Nanjing). He kept interfering, issuing orders which were out-of-date by the time they arrived, and bypassing established chains of command in favour of direct communication with his personal favourites.

The campaign began in earnest on 6 November

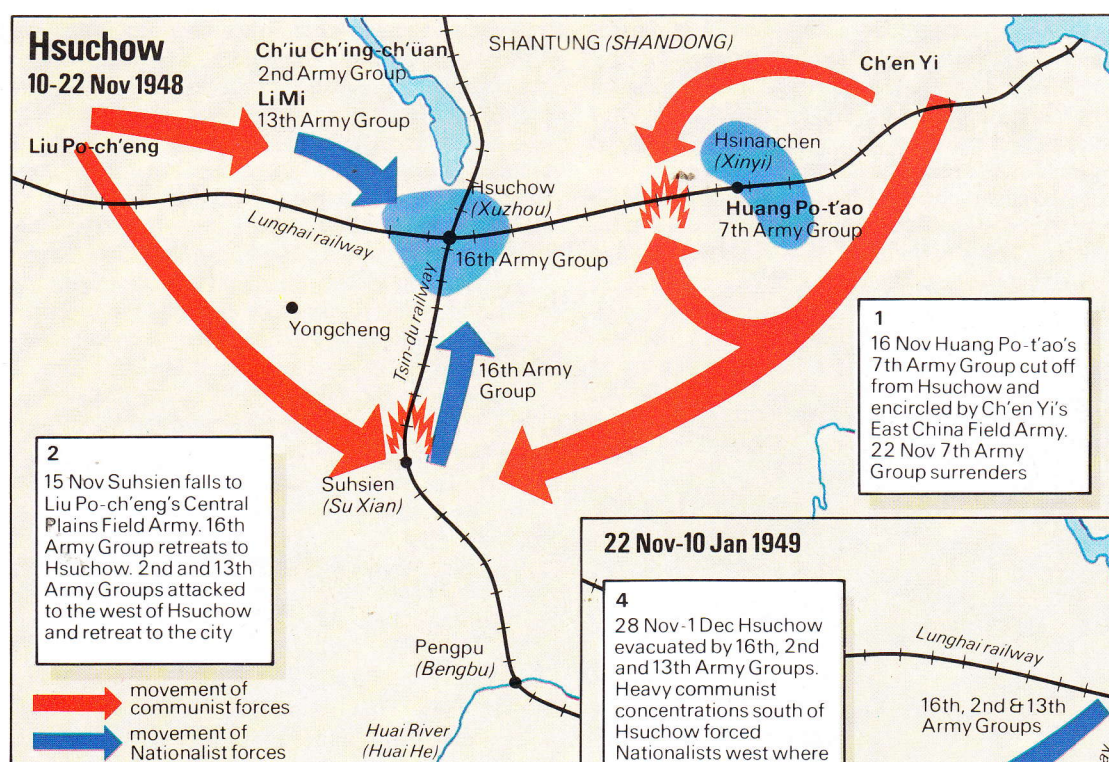
1948 when communist forces seized a county town near Hsuehchow. The next day they destroyed the 181st Division, and the Eighth Army Group to which it belonged promptly opted for a speedy retreat south to the Huai River. The Nationalist forces' poor morale was amply demonstrated on 8 November when four divisions to the north of Hsuehchow defected to the communists. A couple of days later the communists drove a wedge between Huang Po-t'ao's Seventh Army Group and the city. On 11 November it was reported that one million troops were locked in combat along a 320km (200 mile) front.

Cut off from Hsuehchow, Huang Po-t'ao desperately sought to safeguard his position by pulling back those of his units at the coastal end of the Lunghai railway, but this only served to complete his isolation for communist forces immediately moved into the evacuated area, encircling Huang's army and denying it access to the sea. What then followed was a classic example of the factionalism that existed among the Nationalists. On becoming aware of Huang's predicament, Chiang Kai-shek ordered Ch'iu Ch'ing-ch'uan to lead the Second and Thirteenth Army Groups to his assistance. But Ch'iu's dislike of Huang was such that he chose to leave his 'brother officer' to stew in his own juice. Ten days after embarking on the 'relief operation', Ch'iu's powerful force of 15 divisions had covered only 13km (8 miles) and was still 20km (12 miles) from Huang's western-most position.

While this was happening, Liu Po-ch'eng mounted an attack on Suhsien (Su Xian), a town on the Tsin-pu railway to the south of Hsuehchow. The Sixth Army Group lost two divisions to the troops of the 'one-eyed dragon' and immediately followed the example of the Eighth Army by retreating to the Huai River. The Sixteenth Army Group withdrew to Hsuehchow, having lost one division. Suhsien fell on 15 November and with it Hsuehchow's rail communications to the south were severed. The Second, Seventh, Thirteenth and Sixteenth Army Groups were now isolated in the Hsuehchow sector.

The communists next attacked both the Second and Seventh Army Groups in an attempt to prevent them from linking up. The Seventh tried to break out of its





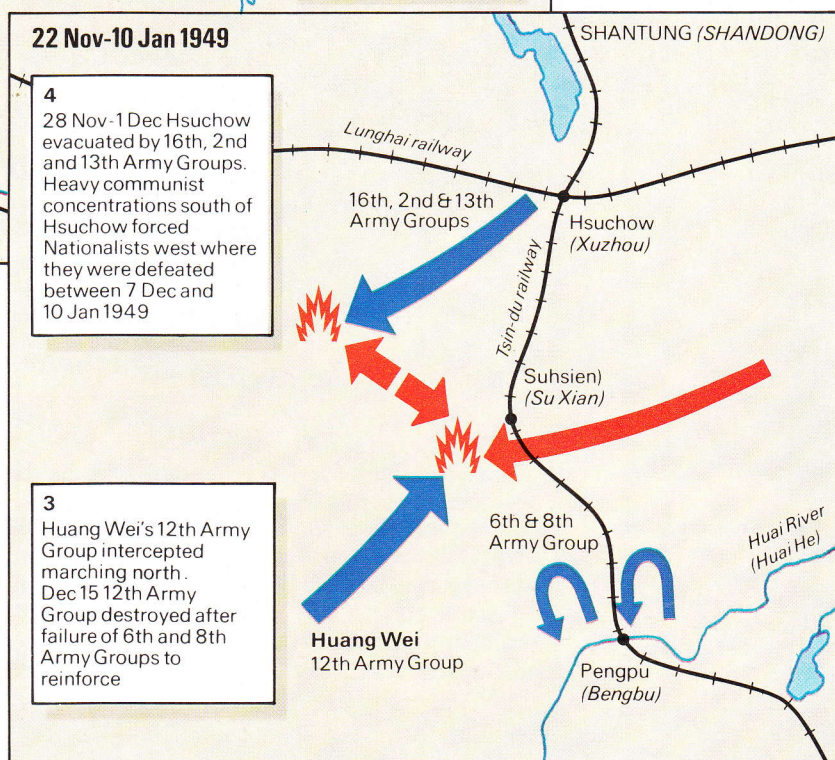
encirclement, but only 3000 men succeeded in reaching the Second Army Group. On 22 November the survivors of the original 90,000 men in the Seventh Army Group surrendered. Huang Po-t'ao, their commander, died of wounds received.

At this point Chiang Kai-shek tried to redeem an increasingly hopeless situation by throwing even more men into the campaign. Huang Wei's Twelfth Army Group of 120,000 men was ordered to march north to join forces with the Nationalist armies in and around Hsuehchow. The communists responded by massing 250,000 soldiers to the south of the city, intercepting Huang and encircling his forces on 26 November.

Chiang then ordered his forces in Hsuehchow, which still numbered some 250,000 men, to break out and link up with Huang Wei's Twelfth Army Group. Liu Chih, commander-in-chief in Hsuehchow, prudently chose to fly to safety in Pengpu (Bengbu) on the Huai River, as did the commander of the Thirteenth Army Group and Colonel Chiang Wei-kuo, commander of the still-unused Armoured Corps and son of the generalissimo himself.

Other Nationalist generals, however, attempted to follow Chiang's orders. The commander of the Sixteenth Army Group left Hsuehchow with his three remaining divisions and struck south towards Suhsien. Ch'iu Ch'ing-ch'uan then led a force composed of the Second and Thirteenth Army Groups and the Armoured Corps out of Hsuehchow on 28 to 30 November. On 1 December Tu Yu-ming led the rearguard from the city.

Hopes that it would be possible to link up with the Twelfth Army Group were quickly dashed by the massive communist concentrations to the south of the city, and the Hsuehchow forces veered west after sustaining heavy losses. Hampered by heavy equipment, personal possessions, families and camp followers, the Nationalists moved very slowly. About 32km (20 miles) from Hsuehchow their progress was halted by communist troops who had dug three lines of deep



trenches. The Sixteenth Army Group was annihilated when it tried to break through on 7 December. Thus Tu Yu-ming's and Huang Wei's forces remained isolated from each other to the northwest and southwest respectively of Suhsien. The Sixth and Eighth Army Groups, already noted for their willingness to run away, were ordered north from the Huai but showed a marked reluctance to seek out the communists and, indeed, cleverly avoided those areas where the enemy was to be found in strength. Subjected to relentless artillery bombardment, Huang Wei's Twelfth Army capitulated on 15 December.

The communists then concentrated their efforts on the hapless forces of Tu Yu-ming and by late December had moved 300,000 men into position around them. On 6 January 1949 they launched a general attack, supported by heavy artillery. At this stage any remaining willingness among the Nationalist forces to continue to resist was destroyed by news reaching them of a proposal which was unbelievably callous and inept, even by the standards of Chiang Kai-shek. Faced with the prospect of the imminent loss of much valuable equipment, it was suggested in Nanking that



## CHINESE CIVIL WAR

The first soldiers of the communist People's Liberation Army enter Nanking, the Nationalist capital. There was no looting and pillaging from this victorious force; their policy towards the civilian population was expressed in their 'three commandments': 'Do not take even a needle and thread; consider the people your family; all that you borrowed, you must return.'

this should be destroyed by air bombardment regardless of the effects on Nationalist troops! Tu Yu-ming's forces surrendered without delay. General Ch'iu Ch'ing-ch'uan was killed in the final stages of battle, and Tu Yu-ming was captured trying to escape disguised as an ordinary soldier.

On 10 January the Huai-hai campaign was over. In 65 days the Nationalists had lost about 550,000 men, some 327,000 of whom the communists claimed to have taken prisoner. The impact on the course of the civil war was dramatic. Between September 1948 and the end of January 1949 Nationalist forces had been reduced to about 1,500,000 men of whom approximately only 500,000 were service troops. In the space of four and a half months the Nationalists had lost 45 per cent of their total troop strength. Communist strength, by contrast, had mounted to over 1,600,000, virtually all of whom were combat effectives.

### Red China's fighting men

Soon after the communist triumph in 1949 Lieutenant-Colonel Robert B. Rigg of the US Army reported that 'the soldiers of present-day Red China as a group can probably outmarch those of any other nation, including the majority of our own. Like the Japanese, they can get along on less food than can US soldiers. Their attitude toward death is not necessarily one of indifference, but they obey orders that other troops would challenge. PLA men are products of a stiffer and more brutal system of discipline than are our own. Their health is below the standards we apply to our military service. Their training is below American standards of completion, but this is compensated for by the fact that the greater part of these Chinese soldiers have been in actual combat for years. Their stealth is superior.'

The communists were now unstoppable, and the Nationalists' belated attempts at negotiation were contemptuously rejected. In north China Fu Tso-yi entered secret negotiations with the communists who, as a result, were able to occupy the key cities of Tientsin (Tianjin) on 15 January and Peking (Beijing) eight days later. Attention could then be devoted to the Nationalist bastions of the Yangtse (Chang Jiang). The Nationalist capital of Nanking fell to Ch'en Yi on 23 April and on 25 May Shanghai was occupied.

Thereafter the Nationalists continued to offer resistance, and to engage in final attempts to raise new levies from a dispirited and resentful population. It was not until 27 December 1949 that Chengtu (Chengdu), the capital of Szechwan (Sichuan) province fell to communist forces. Guerrilla forces remained in some of the more remote provinces, but what was left of Chiang's regular armies had by that time retreated to the island province of Formosa (Taiwan). With the confidence that their victory was absolute the communists proclaimed the establishment of the People's Republic on 1 October 1949, and made Peking their capital.

Thus a civil war, which had been fought intermittently since 1927, was brought to a close. The Nationalists lost China because of military incompetence. But their defeat also demonstrated their weakness in other spheres. Chiang's regime was despotic and corrupt and succeeded, over time, in alienating the vast majority of the Chinese population.

The communists were victorious, not only because of their superiority in strategy and tactics, but primarily because they offered the Chinese people a better deal. In the areas they controlled the communists provided reasonably honest administration and a host of valuable political, social and economic reforms which were of particular benefit to the peasantry but which also appealed to other groups. Based in the great cities, the Nationalists cared little for the peasant majority. In essence they lost China because, as one writer has put it, 'the soldier of Chiang Kai-shek knew not why he fought'. **John Gardner**





# The will to win

Is morale the single most important factor in war?



Most rational people fear death and are apprehensive about the nature of its coming. They will go to great lengths to avoid situations in which death is a possibility and will strive to achieve the basic requirements of long life – health, an adequate diet and personal security. But in war this changes. Ordinary human beings, possessing no gift of immortality, are expected consciously to face the probability of death, mutilation and pain, while trying hard to inflict the same punishment upon the enemy. It is an unnatural and frightening experience, often played out in an alien environment under conditions far removed from normal life. The natural, instinctive reaction is to escape by whatever means are available – flight, surrender or mental collapse.

Unfortunately such reactions do not win battles, so the primary task of all military leaders, at whatever level of command, is to prevent them occurring. Men must be made to forget their natural instincts, sublimating the desire to escape beneath a veneer of courage, cohesiveness and corporate strength, for if this can be achieved the chances of victory increase. As early as the 4th century BC the Greek writer Xenophon recognised the potential: 'You know, I am sure, that not numbers or strength bring victory in war; but whichever army goes into battle stronger in soul, their enemies cannot withstand them.'

In more modern times such 'strength of soul' has been defined as 'morale', but its intangible nature remains. It is not something which can be imposed; it is a feeling which must come from the soldiers themselves, manifested in a desire to win and a will to withstand the pressures of war. 'High morale,' as

Field Marshal Viscount Slim of Burma has said, 'means that every individual in a group will work – or fight – and, if needed, will give his last ounce of effort in its service.'

But the creation and maintenance of morale is by no means easy. Commanders in the past often ignored its desirability entirely, preferring to substitute iron discipline for individual willpower. At the battle of Waterloo in 1815, for example, British soldiers were expected to withstand the terrifying ordeal of French artillery and cavalry attacks not through their personal resolve but under the threat that, if they did not, flogging or execution would result. Nor is this process completely ignored in the more modern age: the ritualistic 'oathing' ceremonies of the Mau Mau in Kenya in the 1950s promised instant death or tribal disgrace to disloyal recruits in the campaign against the British.

Yet it is widely accepted that threats cannot succeed on their own. All armies need a certain amount of imposed discipline, of course, if only to ensure a coherent command structure, but as fighting units have become smaller and more isolated on the modern battlefield, soldiers no longer come under close supervision and have to fall back on their own resources. A foot-patrol on the streets of Belfast, a guerrilla group in the mountains of Afghanistan or the crew of a tank or aircraft have to be capable of producing their own discipline and sustaining their own morale. As Lord Moran wrote in *The Anatomy of Courage*, 'a man with high morale does things because in his own mind he has decided to do them.'

A key factor in this decision is undoubtedly lead-

The ability to keep going under fire is one of the keys to success. The Israeli forces that poured into the Lebanon in 1982 (above) were secure in the knowledge of their superiority, and their morale was correspondingly high.



## MORALE IN WAR

ership, for any soldier will feel more secure and better able to cope with the pressures of battle if he has confidence in his officers. A good leader, at any level of command, should care for the men under him, understand what they are capable of achieving and be prepared to set an example of courage, resolution and common sense. In Lord Moran's words again, he should be able to 'frame plans which will succeed and . . . persuade others to carry them out in the face of death'. If this is achieved, regardless of the type of military formation involved, morale will begin to emerge out of cohesiveness and loyalty. The peasants who followed Mao Tse-tung on the Long March in 1934-35 were reacting to the leadership of political officers of the Chinese Communist Party, just as the soldiers of the 1st Battalion of the Gloucestershire Regiment, surrounded at Choksong on the Imjin River in Korea in April 1951, looked for inspiration to their officers and continued to resist, literally until overrun by communist forces. Obviously if the leaders fail to act as good examples to their men, morale will suffer – the Egyptians left leaderless in the Sinai desert in June 1967 showed this by following their natural instincts to flee or surrender to the advancing Israelis – but the emphasis placed upon effective leadership in all armies implies that this is a lesson already well learnt.

One way of producing the necessary leaders is through careful training, and this applies equally to the ordinary soldiers in the sense that the natural fears of war can be lessened through preparation. Intensive training, designed to provide a series of rehearsed responses to the stimuli of battle, is the favoured method in most armies, guerrilla as well as regular, for if a soldier has something definite to do when faced with enemy action, he is less likely to pause and allow his fears to materialise. As J. T. MacCurdy in *The Structure of Morale* points out, 'there is nothing so conducive to fear as not knowing what to do', so time spent on the seemingly mundane and repetitious tasks

of weapons drill, advance-to-contact, digging-in or defending unit locations is rarely wasted. If, in addition, the soldiers are educated in the tactics and weapons capabilities of the enemy, they will be less vulnerable to surprise and better able to face the traumatic experience of battle.

But care needs to be taken, for if the soldiers are geared to specific enemy actions which do not then eventuate – if, for example, the enemy uses new tactics or unexpected weapons – they may become confused and open to panic. A case in point is the impact of German blitzkrieg tactics, with their novel use of dive-bombers and fast-moving armour, upon Allied troops in France in 1940, although the process of demoralisation need not always be that dramatic. If soldiers are told in training that the enemy has certain material deficiencies which weaken his capabilities and then they suddenly find out that this is not so, the effects can undermine rather than quickly destroy morale. American troops discovered this in Vietnam in early 1968.

During the night of 6/7 February 1968 an American Special Forces camp at Lang Vei, southwest of Khe Sanh in South Vietnam, was overrun by North Vietnamese regular troops. In itself this was not particularly remarkable – the camp was isolated and its

The regimental tradition of the British Army has usually been seen as a considerable aid in maintaining the morale and resolve of its soldiers. Seemingly irrelevant ceremonies, such as trooping the colour (below), may well add to the fighting efficiency of the Brigade of Guards. Bottom: Guardsmen prepare to move forward in the Falklands in 1982.







defences were weak – but the effects were far-reaching. For the first time in this war the North Vietnamese used tanks (11 Soviet-built PT76s) in their assault and this sent a shock-wave which spread rapidly through the American forces elsewhere in Vietnam. Michael Herr, in his memorable book *Dispatches*, describes a typical reaction: 'Jesus, they had tanks. Tanks! . . . After Lang Vei, how could you look out of your perimeter at night without hearing the treads coming?' American soldiers, already unsure about the war and the reasons for their own involvement, were suddenly presented with evidence which ran counter to their belief that the enemy was unsophisticated and poorly equipped. Their morale suffered accordingly.

So training alone cannot guarantee high morale; it can only act as a reinforcement to something far deeper in the soldier's psyche which strengthens his will to resist. In most organisations, civilian as well as military, this may be created through group loyalty, for if someone values the well-being of his friends he will be more likely to work hard in the interests of the group rather than for purely personal gain. In a military context this is extremely useful, overlaying a soldier's natural fears with something which is of more importance to him and which he will be prepared to protect even to the extent of endangering his life.

In the British Army this has been largely achieved through the 'regimental system', a unique organisational framework which thrives on group loyalty. When a soldier enlists he does not join 'the army' as such, but a small part of it – his regiment. In most cases he is trained for that unit and may be expected to spend his entire service life within it. He comes to regard it as his 'family', with all the emotional ties of loyalty which that entails. Lieutenant-Colonel John Baynes, in his book *Morale*, made a detailed study of one such unit – the 2nd Battalion of The Cameronians (Scottish Rifles) – under the pressures of war in 1915 and he places regimental loyalty at the top of his list of



requirements for high morale. When it is added that the system also produces a strong feeling of tradition, which the individual soldier is loath to break by bringing disgrace upon his regiment in battle, it may be appreciated that it is a worthwhile organisational exercise. Indeed, many American commanders are convinced that their system of producing soldiers for the army as a whole, with no regimental continuity or tradition, contributed to the decline in morale in Vietnam. They are in favour of an extension of the British pattern to the United States.

At the present time, however, the British system is the exception rather than the rule, so we must look elsewhere for a universally applicable answer to the question of loyalty. There are many possibilities. If, for example, the soldier is dedicated to a cause then he is more likely to be prepared to make personal sacrifices and stand firm in battle. One of the most obvious such causes is patriotism, enhanced dramatically if the country itself is directly threatened, and in this the Israeli defence forces provide the best modern example.

In October 1973 they were surprised by a coordinated Egyptian and Syrian assault which threatened the existence of the Jewish state. Furthermore, as Israeli reserves were mobilised and rushed to the Sinai and Golan fronts, they encountered weapons which undermined the very basics of their tactical doctrine – precision-guided anti-tank and anti-aircraft missiles capable of destroying the traditional tools of Israeli victory. In such circumstances morale should have been weakened, especially as Syrian tanks approached the Jordan River. But the Israelis stood firm, even finding time to perfect successful counters to the missiles in the midst of battle before going over to the offensive. It was a remarkable achievement, given the problems. Many agree that this was only possible because of the deeply-held conviction that the Israeli forces were all that stood against the complete destruction of the state. If the state was to survive, sacrifices had to be made, far outweighing the personal fears of individual soldiers.

Patriotism may be only a part of the soldier's loyalty. In many guerrilla armies, particularly those which follow the teachings of Mao Tse-tung, the difficult problem of motivation may be eased by providing a political aim which transcends the logic of instinct. A poor peasant, landless, starving and repressed, may be mobilised to military action by promises of a better life, even to the extent of accepting that his own death may be required to guarantee improvements for future generations. Such an appeal may be further reinforced by a desire for political independence, especially from colonial rule. The hordes of

Keeping soldiers clean and fed is important if they are to fight at their best.

Above: An Israeli field shower in the Sinai in 1967. Left: South Vietnamese troops snatch a meal in a mountain strongpoint they are defending against communist forces.





Above: Religious rather than professional or nationalist motivation assumed a new importance to the Iranian Army after the downfall of the Shah and the establishment of a fundamentalist Islamic regime. Below: For many soldiers the sight of death on the battlefield can be overwhelming – as this US Marine found on Hill 881 in Vietnam in May 1967.

Viet Minh fighters who hurled themselves time after time against French defences on the Red (Hong) River in 1951 and at Dien Bien Phu three years later undoubtedly felt this way, achieving remarkable long-term results despite enormous casualties. Finally, religious belief may create the same effect. The unexpected resolve shown by the Iranian armed forces since the Iraqi attack of September 1980 owes much to their belief in the Islamic revolution preached by the Ayatollah Khomeini.

Obviously if such beliefs are ever undermined then morale will begin to crack. The lack of domestic support for the war in Vietnam, manifested by the peace movement of the late 1960s, contributed to the decline in American service morale, principally by casting doubts in many soldiers' minds about the moral justification for the conflict. As the United States was clearly not directly threatened and its

people were openly critical of their political leaders, many soldiers soon came to regard Vietnam as a place for which it was not worth making sacrifices. Similar problems affected the French Army in Indochina (1945-54) and Algeria (1954-62) and the Portuguese forces in Africa (1961-74). In all cases the results were civil-military alienation and political disaffection among demoralised armed forces.

Good morale must therefore have its roots in self-discipline, leadership, training, loyalty and belief, but there is one other factor worth considering. A soldier's resolve may be dramatically weakened if he is not cared for in the physical sense. Battle is traumatic enough without having to worry about such things as food, water, medical support or contact with home, so most armies – guerrilla as well as conventional – will devote considerable effort to this aspect. Mao Tse-tung's emphasis upon the creation of 'safe base areas', within which his revolutionary fighters could gain shelter, food and rest through a sympathetic population, is a pertinent example, equivalent to the enormous administrative 'tail' which now accompanies most conventional armies. Only if this 'back-up' works, will the soldier fight at his most efficient level.

This was a point well understood by Field Marshal Slim in Burma in 1942-43 when he devoted enormous resources to improving the health and welfare of the British Fourteenth Army, transforming it from a number of demoralised units into an effective fighting force. But if problems abound, morale will swiftly crack. The defeat of insurgents in both Malaya (1948-60) and Kenya (1952-60) was virtually guaranteed once the British forces had cut them off from their sources of food supply.

Most military commentators have agreed that morale is probably, in the words of Field Marshal Lord Montgomery of Alamein, 'the greatest single factor in war'. If it exists, soldiers of any type or background will face the pressures of battle; if it does not, chaos will ensue as the soldiers lose all evidence of military cohesiveness and rapidly regress to their original characters – ordinary human beings, frightened out of their wits by the trauma of war. In such circumstances, no amount of discipline or punishment will prevent defeat, but if the ingredients of morale are mixed in the right proportions, the chances of victory are enhanced. And once that happens, a self-supporting process may begin: as Montgomery observed, 'the best way to achieve a high morale in wartime is by success in battle.'

**John Pimlott**





# Key Weapons Soviet Army SAMs







Previous page: One of the Soviet Union's more effective surface-to-air missiles, the highly mobile SA-4. Above: The SA-1 was the first missile in the Soviet SAM series; although a technological breakthrough in the 1950s this SAM was soon superseded by smaller and more flexible types.

Soviet military thinking has always emphasised the role of anti-aircraft defence within its armed forces, and the Soviet Army is well protected by a dense AA (anti-aircraft) umbrella made up of both guns and missiles. To carry out its demanding requirements Soviet AA equipment has to be highly mobile and be capable of accompanying mechanised and armoured forces into the combat zone. In addition these forces must be able to withstand the inhibiting effects caused by nuclear, biological and chemical warfare, a commonplace factor in a full-scale superpower conflict.

The theory behind heavy battlefield anti-aircraft defence has largely been vindicated through the Vietnam and Yom Kippur Wars. In both these conflicts considerable numbers of American and Israeli combat aircraft were committed to air-defence suppression sorties; and over North Vietnam anything from 25 to 50 per cent of US aircraft were forced into this role, thus reducing substantially the number of aircraft available for bombing missions.

The Soviet Union fields an awesome array of anti-aircraft guns, but the most important elements within their AA armoury are the SAM (surface-to-air missile) systems. Designed to provide a full range of combat functions, Soviet SAMs range from hand-held infantry weapons to vast missiles capable of carrying out semi-strategic missions.

Estimated to have come into service as early as 1954, the SA-1 Guideline represented a considerable breakthrough in Soviet missile technology; it was the first operational SAM in the world apart from the Swiss RSC series. Due to its considerable size and weight – 12m (39ft 5in) and 3200kg (7055lb) – the SA-1 has been considered as part of the Soviet Union's fixed strategic defences and since 1960 it has

steadily been replaced by more advanced models.

The SA-2 Guideline became operational in 1957 and since then has become the most combat-tested SAM to see operational service, having been used extensively in Vietnam and the Middle East. The SA-2 came to the attention of the West in 1960 when one shot down the American U-2 'spy' plane piloted by Francis Gary Powers over the Soviet Union. From then on even the highest-flying aircraft were vulnerable to surface-to-air missiles. Since the late 1950s a number of modifications have been incorporated into the SA-2 in the light of combat experience, but despite these improvements the SA-2 system has been characterised by its simplicity and robustness which has enabled it to be operated by technologically unsophisticated customers, most notably Egypt, Syria and North Vietnam.

The simplicity of the SA-2's operation has, on the other hand, meant that it can be outwitted by well-trained air crews, either through ECM (electronic countermeasures) as employed by the Americans in Vietnam, or by relatively simple evasive manoeuvres of the type used by the Israelis in the Middle East. Once the SA-2 had been spotted, the pilot could swing his aircraft towards the missiles and then swiftly dive below it, a manoeuvre the ungainly SA-2 would be unable to follow.

As the SA-2 was designed for high-level aircraft interception it was supplemented in 1961 by the SA-3 Goa, produced to take on aircraft at medium and low altitudes. First used in combat in the Middle East in the late 1960s and in North Vietnam in 1972 it had some initial success, but like the SA-2 its ability to knock-out advanced combat aircraft has been rendered almost negligible. During the 1970s both mis-





siles were replaced in the Soviet Union by more advanced types though they are still used by the Warsaw Pact and in other countries which deploy Soviet weapons.

The SA-4 Ganef marked a considerable improvement on its predecessors, being capable of in-depth defence against aircraft flying at a variety of altitudes, while at the same time being carried by a highly-mobile launch vehicle. Consisting of two missiles mounted on a tracked launcher the SA-4 has the ability to advance with the swiftest mobile forces and yet provide effective air-defence protection to a range of 70km (43 miles). Introduced in 1964 the SA-4 has not been used in combat; although a number were stationed in Egypt during 1970-72 they were withdrawn prior to the Yom Kippur War in 1973. An updated version was brought into operation in 1974 with improved capabilities at low altitudes and it is thought that this missile may have its own terminal radar-homing system.

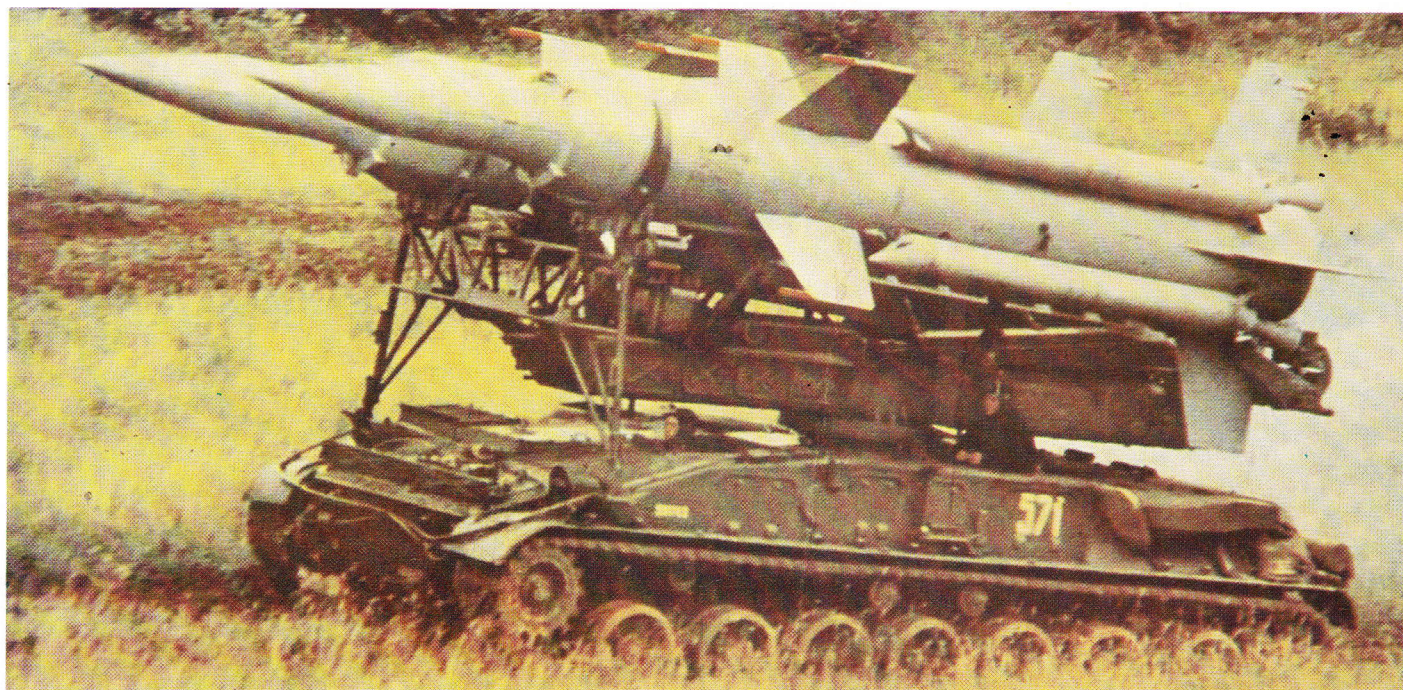
The SA-5 Gammon can hardly be considered a conventional SAM, for with a launch weight of 10,000kg (22,050lb) and a range of 250km (155 miles) it forms part of the Soviet static defence system.

When the SA-6 Gainful was first observed in a Red Square parade in 1967 few Western observers had any idea of the capabilities of this self-propelled, triple-launcher missile system. In 1973, Egyptian SA-6s destroyed a considerable number of Israeli aircraft during the first few hours of the Yom Kippur War and it rapidly gained a fearsome reputation. This was largely unjustified, however, for despite its manoeuvrability, sophisticated terminal radar guidance and low-level capability, by the end of the fighting Israeli

Above: A captured SA-2 of the Egyptian armed forces is inspected by curious Israeli troops following the campaign in the Sinai during the Six-Day War of 1967. Right: SA-2s have been distributed throughout the Warsaw Pact and here a detachment of Polish troops answers an alert during an exercise held in 1981.







pilots had come to terms with the SA-6, having mastered it through a combination of evasive action techniques and by the timely release of 'chaff' clouds which disturbed the missile's guidance system. The SA-6's weaknesses were revealed further during the Israeli invasion of the Lebanon in 1982 when Israeli defence suppression aircraft wiped-out the Syrian SA-6 air-defence system with contemptuous ease.

Although the SA-6 had proved a useful and mobile weapon the Soviet authorities saw its limitations and in 1974 brought out the SA-8 Gecko. Considerably more advanced than the SA-6, the SA-8 is considered to have the necessary acceleration to hit fast-moving aircraft at low altitudes. The launch vehicle allows four missiles to be carried, which can be fired in pairs at separate targets. The tracking radar is carried on the launch vehicle (especially designed for amphibious operations) and provides the SA-8 missile with a maximum range of up to 15km (9 miles). Not having been used in combat, little is known of its true capabilities, however, although its radar guidance system is thought to be supplemented by an infra-red terminal homing system.

Distinct from the radio-command guidance systems of most SAMs are the SA-7 Grail and SA-9 Gaskin missiles which use a very simple infra-red homing system designed to lock onto the exhausts of passing aircraft. The SA-7 can be carried by individual infantrymen and the latest models are capable of shooting down slow-moving aircraft at ranges of up to 5.6km (3.5 miles). More advanced, the SA-9 is quad-mounted on scout cars and is equipped with a larger warhead. The great advantage of these portable weapons is that they allow units as small as an infantry section to have their own SAM defence, and their cheapness and simplicity of operation make them available to insurgent groups the world over. But as with other simple weapon systems, the SA-7 and SA-9 are easily countered and few modern combat aircraft would experience real problems from such weapons, although helicopters and slow-moving counter-insurgency aircraft remain vulnerable.

The latest generation of Soviet SAMs are the





Below: East German SA-4s are prepared for action. Opposite top: SA-4s carry out manoeuvres in Eastern Europe. In the advent of war with Nato the SA-4 would play an important role in attempting to fend off Western strike aircraft from disrupting the advance of the Soviet Army. Opposite bottom: The portable and cheap SA-7 infra-red SAM is given a firing demonstration by a Soviet soldier.



SA-10 and SA-11 which have been designed to counter low-flying strike aircraft such as the US F-111 and the European Tornado as well as US cruise missiles. The SA-10 is a long-range weapon of high manoeuvrability combined with exceptional acceleration, and it is thought to pose a real threat to Nato strike forces. The SA-11 is a shorter range SAM and is fitted on triple or quadruple launchers. From 1978 it began to replace the ageing SA-6 batteries within the Soviet Union.

The strength of the Soviet SAM system lies not in any one particular missile – for any missile can be mastered over time – but in the fact that Soviet military planners see the whole SAM programme as a continually evolving one, each new development providing a springboard for further improvement. Because of this the Soviet Union has been able to develop missiles as advanced as the SA-10 and SA-11 that look set to provide Nato air forces with their greatest challenge yet.

Overleaf top: SA-8 launchers (left) stand side-by-side with truck-borne SA-2s. Soviet air defence theory emphasises integrating all aspects of the SAM system. Overleaf bottom: An SA-9 launcher is shown here with only its two outer missile boxes in position on the launcher rails.





## THE KEY SOVIET SAMs

### SA-2 Guideline

**Length** 10.6m (35ft)  
**Launch weight** 2300kg (5065lb)  
**Guidance** Radio command  
**Fuel** 1st stage, solid; 2nd stage, liquid  
**Maximum speed** Mach 3  
**Maximum range** 35km (21.7 miles) – later models 50km (31 miles)  
**Warhead** 130kg (287lb) high explosive

### SA-3b Goa

**Length** 6.1m (20 ft)  
**Launch weight** 950kg (2094lb)  
**Guidance** Radio command  
**Terminal homing** Semi-active radar  
**Fuel** Two-stage solid fuel  
**Maximum speed** Mach 3.5  
**Maximum range** 18.3km (11.4 miles)  
**Warhead** 60kg (132lb) high explosive

### SA-4 Ganef

**Length** 8.8m (28ft 10in)  
**Launch weight** 2500kg (5512lb)  
**Guidance** Radio command  
**Terminal homing** Semi-active radar  
**Fuel** Four solid-boost motors, plus ramjet sustainer  
**Maximum speed** Mach 2.5  
**Maximum range** 70km (43.5 miles)  
**Warhead** High explosive; weight unknown

### SA-6 Gainful

**Length** 6.2m (20ft 4in)  
**Launch weight** 550kg (1213lb)  
**Guidance** Radio command  
**Terminal homing** Semi-active radar  
**Fuel** Two-stage solid boost motor, plus ramjet  
**Maximum speed** Mach 2.8  
**Maximum range** 37km (23 miles)  
**Warhead** 80kg (176lb); half of which is high explosive

### SA-7 Grail

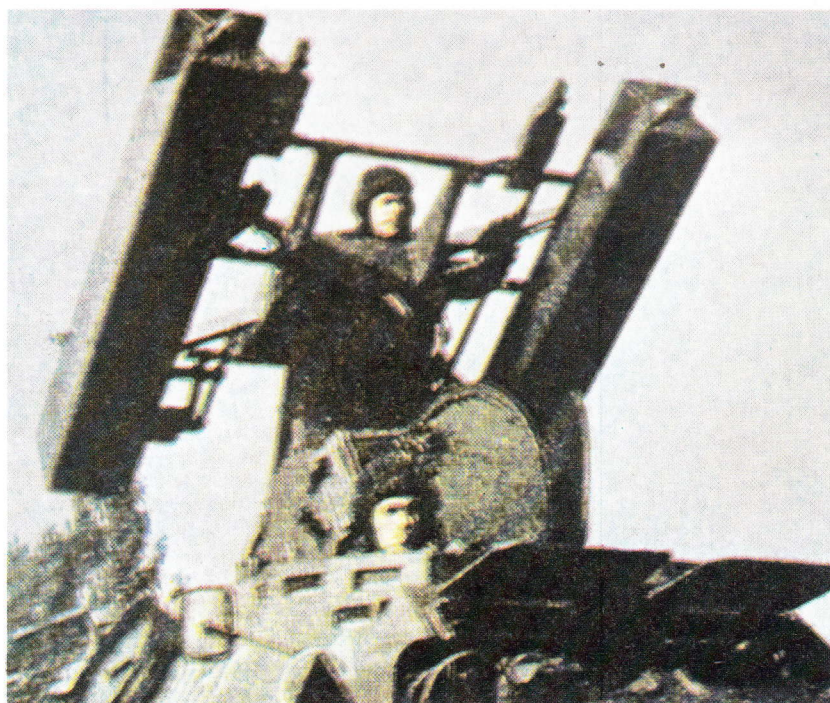
**Length** 1.3m (4ft 5in)  
**Launch weight** 9.2kg (20.3lb)  
**Guidance** Infra-red homing  
**Fuel** Two-stage solid fuel  
**Maximum speed** Mach 1.5  
**Maximum range** 3.5km (2.2 miles) – later models 5.6km (3.5 miles)  
**Warhead** 1.8kg (4lb)

### SA-8 Gecko

**Length** 3.2m (10ft 6in)  
**Launch weight** 200kg (441lb)  
**Guidance** Radio command  
**Terminal homing** Infra-red (or possibly semi-active radar)  
**Fuel** Dual-thrust solid fuel  
**Maximum speed** Mach 2  
**Maximum range** 15km (9.3 miles)  
**Warhead** 40kg (88lb) high explosive

### SA-9 Gaskin

**Length** 1.37m (4ft 6in)  
**Launch weight** 50kg (110lb)  
**Guidance** Infra-red homing  
**Fuel** Solid  
**Maximum speed** Mach 2  
**Maximum range** 7km (4.4 miles)  
**Warhead** 5kg (11lb)



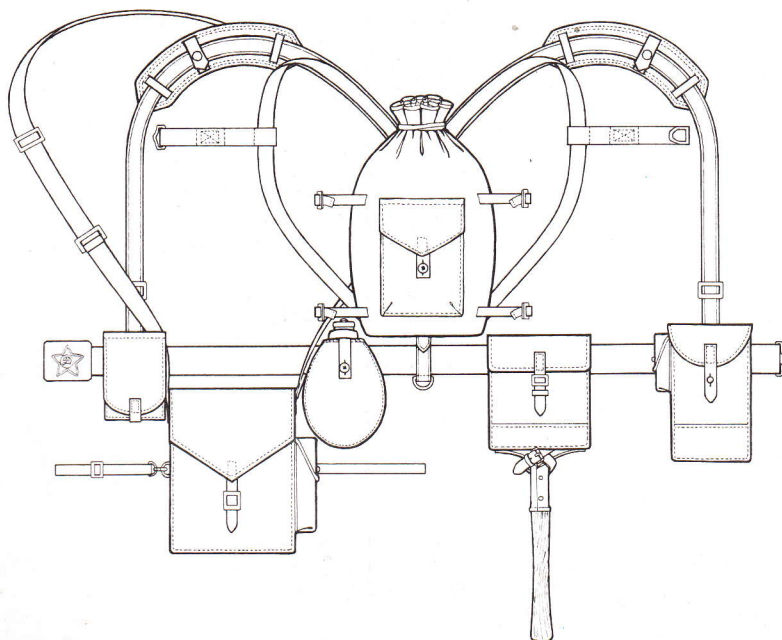


# The Fighting —Men—

## Soviet Army Afghanistan 1980

### Sergeant-Major, Soviet Army, 1980

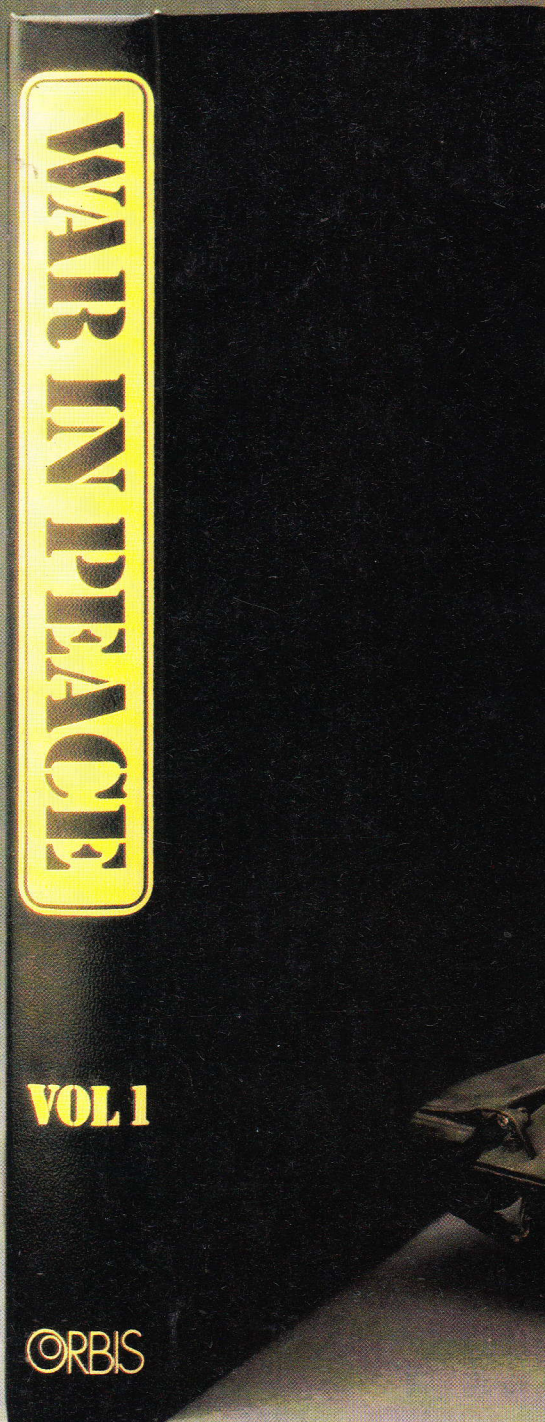
The uniform of the Soviet Army has changed little since the end of World War II, and this example worn by an NCO of a motorised rifle battalion is no exception. The grey-brown overcoat and high leather boots are particularly distinctive, as is the grey, artificial fur cap. As a soldier in a motorised rifle unit, arm of service is indicated by the red gorget patches sewn onto the greatcoat collar, while rank is demonstrated by the red band running down the length of the shoulder straps. Armament consists of a 7.62mm AKM assault rifle and a pistol, most probably a Makarov PM, plus an AKM bayonet which also doubles as a wire cutter. One of the most famous smallarms to have been manufactured since 1945, the AKM is a development of the AK-47 and although not accurate at anything over short range it combines reliability and simplicity of operation with a high rate of firepower. Since the late 1970s the AKM has begun to be replaced by the AKS, a weapon very similar to the AKM but with the exception of having the smaller calibre of 5.45mm.



Left: As with his uniform, the equipment of the Soviet soldier has remained much the same over recent years. The pack is used to carry a ground sheet, foot cloths, rations and a field cooker, and is fitted with looped straps (on either side of the pack) capable of holding a rolled greatcoat or rain cape. On the main leather belt are hung – from the left – a grenade pouch, water bottle, entrenching tool, and an AKM ammunition pouch. Between the grenade pouch and the water bottle is a respirator case which holds the bulky Soviet gas mask and filter unit.



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**C**

hoosing this Standing Order system will mean that you receive your binders regularly as you need them – every twelve weeks. And to start your collection we will send Volume 2 (with a Payment Advice for £3.80) with your FREE Volume 1. You are, of course, free to cancel your Standing Order at any time.

**T**

ick the bottom box if you do not wish to place a Standing Order and we will still send you your free binder, but must charge you £1.00 towards our administration costs and postage, etc. A Payment Advice for this amount will be sent with the free Volume 1.

**P**

lease send no money now – whichever method you choose.



**The Orbis Guarantee** If you are not entirely satisfied you may return the binder(s) to us within 30 days and cancel your Standing Order. You are then under no obligation to pay and no further binders will be sent except upon request.  
**Important** This offer is open only whilst stocks last and only one free binder may be sent to each purchaser who places a Standing Order. Please allow 28 days for delivery.

**Overseas readers:** This free binder offer applies to readers in the UK, Eire and Australia only. Readers in Australia should complete the special loose insert in Issue 1 and see additional binder information on the inside front cover. Readers in New Zealand and South Africa and some other countries can obtain their binders *now*. For details please see inside the front cover.

## PLACE A STANDING ORDER-TAKE ONE FREE!